

Notice of Allowability

Application No.

10/535,282

Applicant(s)

OLDE WEGHUIS ET AL.

Examiner

David A. Rogers

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the application filed 18 May 2005.
2. ☒ The allowed claim(s) is/are 14-26.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date 7/16/05
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 C.F.R. 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee. Authorization for this examiner's amendment was given in a telephone interview with Jonathan Scherer on 26 June 2007. The applicant is amended as follows:

- a. On page 5 (line 28) replace --drive unit 14-- with --drive unit 15--.
- b. On page 9 (line 4) replace --90□-- with --90°--.
- c. Replace claims 14-26 with the following:

14. A device for measuring the static and/or dynamic friction coefficient of a surface comprising:

a housing placed on supports, which is to be positioned on the surface to be examined;

a rotatable shaft, which is vertically disposed in said housing;

a body connected to the end of said shaft that faces towards the surface, which body comprises a contact surface which can be brought into contact with the surface to be examined; and

measuring means for measuring, during operation, the torque caused by the friction between the surface to be examined and the contact surface of the rotating body, wherein the contact surface of the body is in line with the axis of rotation of the rotatable shaft.

15. A device according to claim 14, wherein said shaft is freely movable in vertical direction within the housing.

16. A device according to claim 14, wherein loading means can be placed on the end of the shaft remote from the surface.

17. A device according to claim 16, wherein said loading means comprises weights.

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18. A device according to claim 14, wherein said body can be detached from said shaft.
19. A device according to claim 14, wherein said body takes up an inclined position with respect to the surface to be examined.
20. A device according to claim 19, wherein the inclined position of the body is adjustable.
21. A device according to claim 14, wherein said body has the shape of a foot.
22. A device according to claim 21, wherein the ball of the foot forms the contact surface of said body.
23. A device according to claim 14, wherein the measuring means comprises at least one torsion measuring device.
24. A device according to claim 14, wherein said supports are detachable.
25. A device according to claim 14, wherein said supports are provided with means for increasing the friction between the supports and the surface to be measured.
26. A device according to claim 25, wherein said means for increasing the friction are embodied as studs.

Allowable Subject Matter

2. Claims 14-26 are allowed.
3. The following is an examiner's statement of reasons for allowance.

Japanese Laid Open Patent Application Publication 60-88352 to Sumii *et al.* discloses a friction measuring apparatus comprising a housing (reference item 1) with adjustable supports (reference item 2). A lower disk (reference item 35) is provided on its upper surface with a test material (reference item B). An upper disk (reference item 22) is properly balanced, loaded via weights (reference item 32), and provided with a test material (reference item A) on its lower face. A motor (reference item 41) causes a shaft (reference item 36) to

rotate the lower disk. A torque sensor (reference item 39) is used to measure friction between the two materials. Sumii *et al.* does not teach or suggest a housing positioned on the surface to be examined with a body having a contact surface that faces towards the surface to be examined.

Other references, such as United States Patents 4,712,418 to Augustin, 4,594,878 to Abe *et al.*, and 4,051,7136 to Bao *et al.* each teach providing a housing having supports and a body with a contact surface facing towards a surface to be measured. However, neither Augustin, Abe *et al.*, nor Bao *et al.* teaches a contact surface that is in-line with the rotation of the shaft. Rather, Augustin, Abe *et al.*, and Bao *et al.* teach contact surfaces that are located at a radial distance from the axis of rotation of a shaft.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

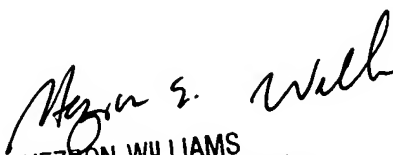
4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David A. Rogers whose telephone number is (571) 272-2205. The examiner can normally be reached on Monday - Friday (0730 - 1600). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron E. Williams can be reached on

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(571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

5. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

dar
27 June 2007


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